## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019638 Address: 333 Burma Road **Date Inspected:** 21-Jan-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Oiu Wen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: OBG** Components

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

## **WELDING**

This QA Inspector observed the following work in progress:

#### **BAY 14**

During random in process inspection of OBG Segment 13BW, this QA Inspector observed that ZPMC personnel performing Magnetic particle testing (MT) had found three linear longitudinal indications on root run of deck panel diaphragm to floor beam flange joint SEG3014J-010/011, at panel point 120.5 on cross beam side. This QA Inspector informed ZPMC Quality Control (QC) Inspector identified as Mr. Li Ming Yang of the issue. Mr. Li Ming Yang informed this QA Inspector that the linear longitudinal indications would be corrected in a manner compliant with the contract documents. See attached pictures.

This QA Inspector observed ZPMC qualified welding personnel identified as 066674, 037932 perform welding by Shielded Metal Arc Welding (SMAW), on deck panel diaphragm to floor beam flange joint of OBG Segment 13BW. Weld joint is identified as SEG3014G-010/011. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2212-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 067993 perform welding by Shielded

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Metal Arc Welding (SMAW), on deck panel diaphragm to floor beam flange joint of OBG Segment 13BW. Weld joint is identified as SEG3014C-009/010. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2212-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 067275, 067876 perform welding by Flux Cored Arc Welding (FCAW), on deck panel diaphragm to floor beam flange joint of OBG Segment 13BW. Weld joint is identified as SEG3014F-351/352. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2232-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 066734 perform welding by Flux Cored Arc Welding (FCAW), on deck panel diaphragm to floor beam flange joint of OBG Segment 13BW. Weld joint is identified as SEG3014B-021/022. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2232-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 037840 perform welding by Shielded Metal Arc Welding (SMAW), on deck panel diaphragm to deck panel diaphragm joint of OBG Segment 13BW. Weld joint is identified as DP3135-001-022, 023. ZPMC Quality Control (QC) Inspector identified as Li Ming Yang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2213-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 037779 perform welding by Shielded Metal Arc Welding (SMAW), on architectural housing assembly of OBG Segment 13CW. Weld joint is identified as AH3003-008. ZPMC Quality Control (QC) Inspector identified as Zheng Zhi Wei was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2213-B-U2-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

# **Summary of Conversations:**

No relevant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Upadhye, Anand	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer